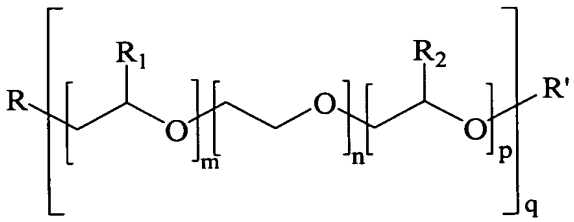
IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~The use of a~~ A water-soluble copolymer as an agent for improving the activation of optical brightness, ~~characterized in that~~ wherein said copolymer has at least one alkoxy or hydroxy polyalkylene glycol function grafted onto at least one ethylenically unsaturated monomer.

Claim 2 (Currently Amended): The ~~use of a~~ water-soluble copolymer as an agent for improving the activation of optical brightness according to claim 1, ~~characterized in that~~ wherein said copolymer consists of at least one monomer of formula (I):



(I)

~~where~~ wherein

- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150,
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$, ~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~
- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane

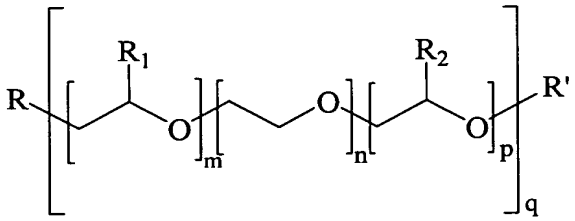
unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and

- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms~~, and preferably represents a hydrocarbon radical having from 1 to 12 carbon atoms and even more preferably a hydrocarbon radical having from 1 to 4 carbon atoms~~[[,]].

Claim 3 (Currently Amended): The ~~use of a~~ water-soluble copolymer as an agent for improving the activation of optical brightness according to claim 1, ~~one of claims 1 or 2~~, ~~characterized in that~~ wherein said copolymer consists of:

a) at least one anionic monomer with a carboxylic or dicarboxylic or phosphoric or phosphonic or sulfonic function or a mixture thereof,

b) at least one non-ionic monomer, the non-ionic monomer consisting of at least one monomer of formula (I):



(I)

~~where~~ wherein

- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150,
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$,

~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~

- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and
- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms, ~~and preferably represents a hydrocarbon radical having from 1 to 12 carbon atoms and even more preferably a hydrocarbon radical having from 1 to 4 carbon atoms,~~

or a mixture of several monomers of formula (I),

c) possibly, at least one monomer of the acrylamide or methacrylamide type or their derivatives ~~such as N-[3-(dimethylamino) propyl] acrylamide or N-[3-(dimethylamino) propyl] methacrylamide,~~ and mixtures thereof, ~~or~~ at least one non water-soluble monomer ~~such as the alkyl acrylates or methacrylates~~, unsaturated esters ~~such as N-[2-(dimethylamino) ethyl] methacrylate, or N-[2-(dimethylamino) ethyl] acrylate~~, vinyls ~~such as vinyl acetate, vinylpyrrolidone, styrene, alphamethylstyrene~~ and their derivatives, ~~or~~ at least one cationic monomer or quaternary ammonium ~~such as [2-(methacryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [2-(acryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [3-(acrylamido) propyl] trimethyl ammonium chloride or sulfate, dimethyl diallyl ammonium chloride or sulfate,~~

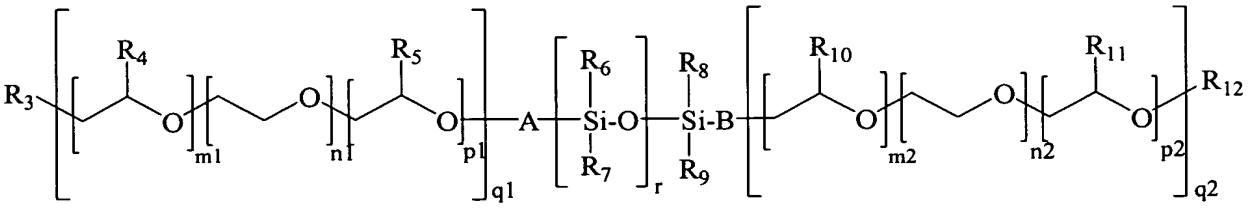
~~[3-(methacrylamido) propyl] trimethyl ammonium chloride or sulfate, or~~ at least one organofluorinated or organosilylated monomer, or a mixture of several of these monomers, and

d) possibly, at least one monomer having at least two ethylenic insaturations referred to as a crosslinking monomer,

the total of the proportions of components a), b), c) and d) being equal to 100%.

Claim 4 (Currently Amended): The ~~use of a~~ water-soluble copolymer as an agent for improving the activation of optical brightness according to claim 1, ~~one of claims 1 to 3~~, ~~characterized in that~~ wherein the organosilylated monomer is selected from ~~among~~ the group consisting of molecules of formulae (IIa) ~~or~~ and (IIb)[[.]],

with formula (IIa)



~~where~~ wherein

- m_1, p_1, m_2 and p_2 represent a number of alkylene oxide units less than or equal to 150,
- n_1 and n_2 represent a number of ethylene oxide units less than or equal to 150,
- q_1 and q_2 represent an integer equal to at least 1 and such that $0 \leq (m_1+n_1+p_1)q_1 \leq 150$ and $0 \leq (m_2+n_2+p_2)q_2 \leq 150$,
- r represents a number such that $1 \leq r \leq 200$,
- R_3 represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane

unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,

- R_4, R_5, R_{10} and R_{11} represent hydrogen or the methyl or ethyl radical,
- R_6, R_7, R_8 and R_9 represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof,
- R represents a hydrocarbon radical having from 1 to 40 carbon atoms, and
- A and B are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms,

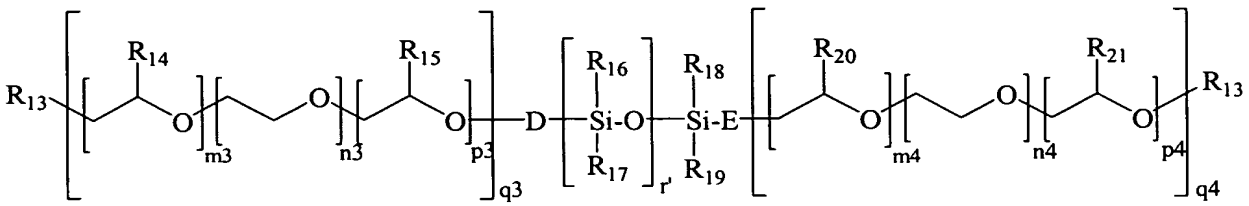
with formula (IIb)

$$R - A - Si(OB)_3$$

~~where~~ wherein

- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- A is a group which may be present, in which case it represents a hydrocarbon radical having from 1 to 4 carbon atoms,
- B represents a hydrocarbon radical having from 1 to 4 carbon atoms or a mixture of several of said monomers,

and ~~in that~~ wherein the crosslinking monomer is selected from the group consisting of ethylene glycol dimethacrylate, trimethylolpropanetriacrylate, allyl acrylate, the allyl maleates, methylene-bis-acrylamide, methylene-bis-methacrylamide, tetrallyloxyethane, triallylcyanurates, and allyl ethers prepared from polyols, ~~such as pentaerythritol, sorbitol, sucrose~~ or selected from the group consisting of molecules of formula (III):



(III)

~~where~~ wherein

- m_3, p_3, m_4 and p_4 represent a number of alkylene oxide units less than or equal to 150,
- n_3 and n_4 represent a number of ethylene oxide units less than or equal to 150,
- q_3 and q_4 represent an integer equal to at least 1 and such that $0 \leq (m_3+n_3+p_3)q_3 \leq 150$ and $0 \leq (m_4+n_4+p_4)q_4 \leq 150$,
- r' represents a number such that $1 \leq r' \leq 200$,
- R_{13} represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- R_{14}, R_{15}, R_{20} and R_{21} represent hydrogen or the methyl or ethyl radical,

- R_{16}, R_{17}, R_{18} and R_{19} represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof, and
- D and E are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms

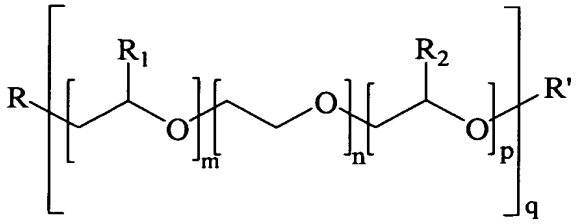
or a mixture of several of said monomers[[,]].

Claim 5 (Currently Amended): The ~~use of a~~ water-soluble copolymer as an agent for improving the activation of optical brightness according to claim 1, ~~one of claims 1 to 4~~, ~~characterized in that~~ wherein said copolymer consists, by weight, of

a) from 2% to 95% ~~and more particularly from 5% to 90%~~ of at least one ethylenically unsaturated anionic monomer having a monocarboxylic function selected from ~~among~~ the group consisting of ethylenically unsaturated monomers having a monocarboxylic function, ~~such as acrylic or methacrylic acid or hemiesters of diacids such as C_1 to C_4 monoesters of maleic or itaconic acid, or mixtures thereof, or selected from among the~~ ethylenically unsaturated monomers having a dicarboxylic function, ~~such as crotonic, isocrotonic, cinnamic, itaconic, maleic acid, or anhydrides of carboxylic acids, such as maleic anhydride or selected from among the~~ ethylenically unsaturated monomers having a sulfonic function, ~~such as acrylamido methyl propane sulfonic acid, sodium methallylsulfonate, vinylsulfonic acid and styrenesulfonic acid or selected from among the~~ ethylenically unsaturated monomers having a phosphoric function, ~~such as vinylphosphoric acid, ethylene glycol methacrylate phosphate, propylene glycol methacrylate phosphate, ethylene glycol acrylate phosphate, propylene glycol acrylate phosphate and their ethoxylates or selected from among the~~ ethylenically

unsaturated monomers having a phosphonic function ~~such as vinylphosphonic acid, or~~ and mixtures thereof,

b) from 2 to 95% and, more particularly, from 5% to 90%, of at least one non-ionic ethylenically unsaturated monomer of formula (I):



(I)

~~where~~ wherein

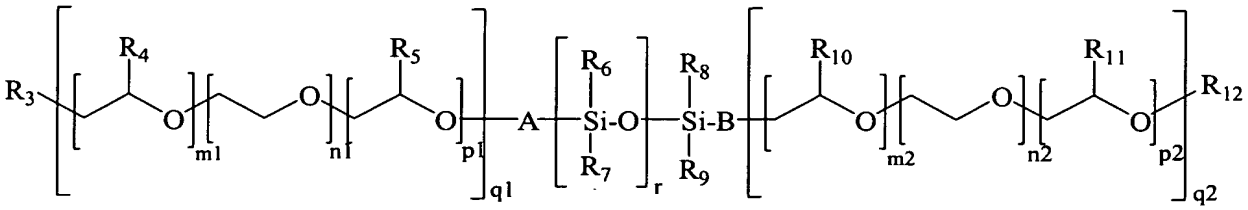
- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150,
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$, ~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~
- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and
- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms, ~~and preferably represents a hydrocarbon radical having from 1 to 12~~

~~carbon atoms and even more preferably a hydrocarbon radical having from 1 to 4 carbon atoms,~~

or a mixture of several monomers of formula (I),

c) from 0% to 5% of at least one monomer of the acrylamide or methacrylamide type or their derivatives ~~such as N [3 (dimethylamino) propyl] acrylamide or N [3 (dimethylamino) propyl] methacrylamide~~, and mixtures thereof, ~~or~~ at least one non water-soluble monomer ~~such as the alkyl acrylates or methacrylates, unsaturated esters such as N [2 (dimethylamino) ethyl] methacrylate, or N [2 (dimethylamino) ethyl] acrylate~~, vinyls ~~such as vinyl acetate, vinylpyrrolidone, styrene, alphamethylstyrene~~ and their derivatives, ~~or~~ at least one cationic monomer or quaternary ammonium ~~such as [2 (methacryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [2 (acryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [3 (acryrylamido) propyl] trimethyl ammonium chloride or sulfate, dimethyl diallyl ammonium chloride or sulfate, [3 (methacrylamido) propyl] trimethyl ammonium chloride or sulfate, or~~ at least one organofluorinated monomer, or at least one organosilylated monomer[[,]] selected ~~preferably~~ from ~~among~~ the group consisting of molecules of formulae (IIa) ~~or~~ and (IIb),

with formula (IIa)



~~where~~ wherein

- m_1, p_1, m_2 and p_2 represent a number of alkylene oxide units less than or equal to 150,

- n_1 and n_2 represent a number of ethylene oxide units less than or equal to 150,
- q_1 and q_2 represent an integer equal to at least 1 and such that $0 \leq (m_1+n_1+p_1)q_1 \leq 150$ and $0 \leq (m_2+n_2+p_2)q_2 \leq 150$,
- r represents a number such that $1 \leq r \leq 200$,
- R_3 represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- R_4, R_5, R_{10} and R_{11} represent hydrogen or the methyl or ethyl radical,
- R_6, R_7, R_8 and R_9 represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof,
- R_{12} represents a hydrocarbon radical having from 1 to 40 carbon atoms, and
- A and B are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms,

with formula (IIb)

$$R - A - Si(OB)_3$$

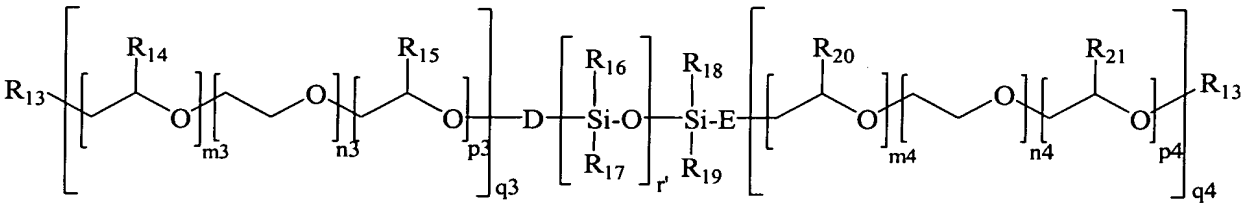
~~where~~ wherein

- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or

vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,

- A is a group which may be present, in which case it represents a hydrocarbon radical having from 1 to 4 carbon atoms,
- B represents a hydrocarbon radical having from 1 to 4 carbon atoms, or a mixture of several of said monomers,

d) from 0% to 3% of at least one crosslinking monomer selected from the group consisting of ethylene glycol dimethacrylate, trimethylolpropanetriacrylate, allyl acrylate, the allyl maleates, methylene-bis-acrylamide, methylene-bis methacrylamide, tetrallyloxyethane, triallylcyanurates, and allyl ethers prepared from polyols ~~such as pentaerythritol, sorbitol, sucrose or others~~, or selected from the group consisting of molecules of formula (III):



(III)

~~where~~ wherein

- m_3, p_3, m_4 and p_4 represent a number of alkylene oxide units less than or equal to 150,
- n_3 and n_4 represent a number of ethylene oxide units less than or equal to 150,
- q_3 and q_4 represent an integer equal to at least 1 and such that $0 \leq (m_3+n_3+p_3)q_3 \leq 150$ and $0 \leq (m_4+n_4+p_4)q_4 \leq 150$,
- r' represents a number such that $1 \leq r' \leq 200$,
- R_{13} represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic,

maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,

- R_{14}, R_{15}, R_{20} and R_{21} represent hydrogen or the methyl or ethyl radical
- R_{16}, R_{17}, R_{18} and R_{19} represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof, and
- D and E are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms

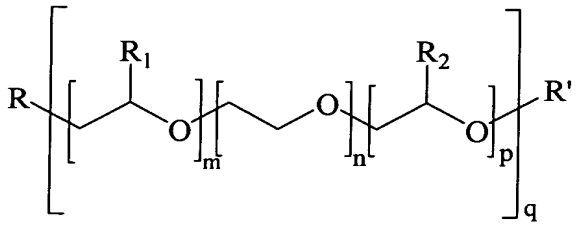
or a mixture of several of said monomers,

the total of the proportions of components a), b), c) and d) being equal to 100%.

Claim 6 (Currently Amended): The ~~use of a~~ water-soluble copolymer as an agent for improving the activation of optical brightness according to claim 1 ~~one of claims 1 to 5~~, ~~characterized in that~~ wherein said copolymer is in its acid form or fully or partially neutralized by one or more neutralization agents having a monovalent neutralizing function or a polyvalent neutralizing function ~~such as, for the monovalent function, those selected from among the group consisting of the alkaline cations, in particular sodium, potassium, lithium, ammonium or the primary, secondary or tertiary aliphatic and/or cyclic amines such as for example stearylamine, the ethanolamines (mono , di , triethanolamine), mono and diethylamine, cyclohexylamine, methylcyclohexylamine, aminomethylpropanol, morpholine or, for the polyvalent function, those selected from among the group consisting of alkaline earth divalent cations, in particular magnesium and calcium, or zinc, as for the trivalent cations, including in particular aluminium, or by certain cations of higher valency~~.

Claim 7 (Currently Amended): An agent for improving the activation of optical brightness, comprising ~~characterized in that it is~~ a water-soluble copolymer having at least one alkoxy or hydroxy polyalkylene glycol function grafted onto at least one ethylenically unsaturated monomer.

Claim 8 (Currently Amended): ~~An~~ The agent for improving the activation of optical brightness according to claim 7, wherein ~~characterized in that it~~ the agent is a water-soluble copolymer consisting of at least one monomer of formula (I):



(I)

~~where~~ wherein

- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150,
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$, ~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~
- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α'-dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or

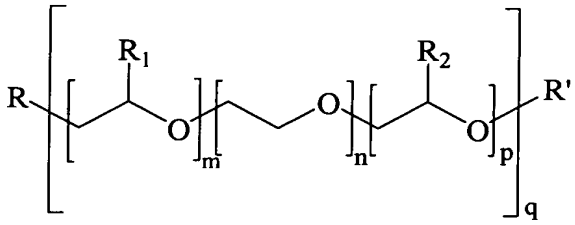
vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and

- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms[[,]].

Claim 9 (Currently Amended): An agent for improving the activation of optical brightness according to claim 7, ~~one of claims 7 or 8 characterized in that it~~ wherein said agent is a water-soluble copolymer consisting of:

a) at least one anionic monomer with a carboxylic or dicarboxylic or phosphoric or phosphonic or sulfonic function or a mixture thereof,

b) at least one non-ionic monomer, the non-ionic monomer consisting of at least one monomer of formula (I):



(I)

~~where~~ wherein

- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150,
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$, ~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~
- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic,

maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and

- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms, ~~and preferably represents a hydrocarbon radical having from 1 to 12 carbon atoms and even more preferably a hydrocarbon radical having from 1 to 4 carbon atoms~~,

or a mixture of several monomers of formula (I),

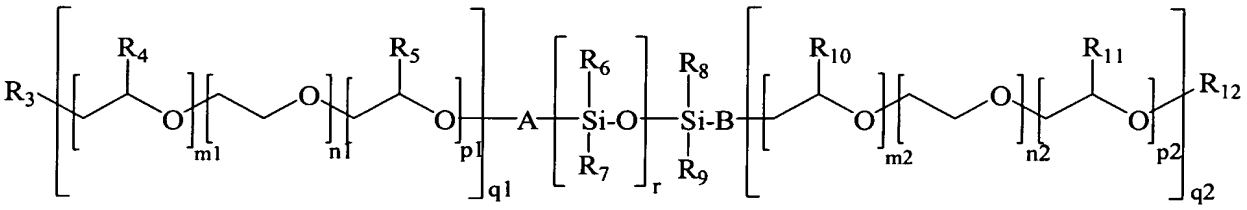
c) possibly, at least one monomer of the acrylamide or methacrylamide type or their derivatives ~~such as N-[3-(dimethylamino) propyl] acrylamide or N-[3-(dimethylamino) propyl] methacrylamide,~~ and mixtures thereof, ~~or~~ at least one non water-soluble monomer ~~such as the alkyl acrylates or methacrylates, unsaturated esters such as N-[2-(dimethylamino) ethyl] methacrylate, or N-[2-(dimethylamino) ethyl] acrylate, vinyls such as vinyl acetate, vinylpyrrolidone, styrene, alphamethylstyrene~~ and their derivatives, ~~or~~ at least one cationic monomer or quaternary ammonium ~~such as [2-(methacryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [2-(acryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [3-(acrylamido) propyl] trimethyl ammonium chloride or sulfate, dimethyl diallyl ammonium chloride or sulfate, [3-(methacrylamido) propyl] trimethyl ammonium chloride or sulfate, or~~ at least one organofluorinated or organosilylated monomer, or a mixture of several of these monomers, and

d) possibly, at least one monomer having at least two ethylenic insaturations referred to as a crosslinking monomer,

the total of the proportions of components a), b), c) and d) being equal to 100%.

Claim 10 (Currently Amended): An agent improving the activation of optical brightness according to claim 7, ~~one of claims 7 to 9 characterized in that~~ wherein the organosilylated monomer is selected from ~~among~~ the group consisting of molecules of formulae (IIa) ~~or~~ and (IIb)[[.]],

with formula (IIa)



~~where~~ wherein

- m_1, p_1, m_2 and p_2 represent a number of alkylene oxide units less than or equal to 150,
- n_1 and n_2 represent a number of ethylene oxide units less than or equal to 150,
- q_1 and q_2 represent an integer equal to at least 1 and such that $0 \leq (m_1+n_1+p_1)q_1 \leq 150$ and $0 \leq (m_2+n_2+p_2)q_2 \leq 150$,
- r represents a number such that $1 \leq r \leq 200$,
- R_3 represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl-isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or

vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,

- R_4, R_5, R_{10} and R_{11} represent hydrogen or the methyl or ethyl radical,
- R_6, R_7, R_8 and R_9 represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof,
- R_{12} represents a hydrocarbon radical having from 1 to 40 carbon atoms, and
- A and B are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms,

with formula (IIb)

$$R - A - Si(OB)_3$$

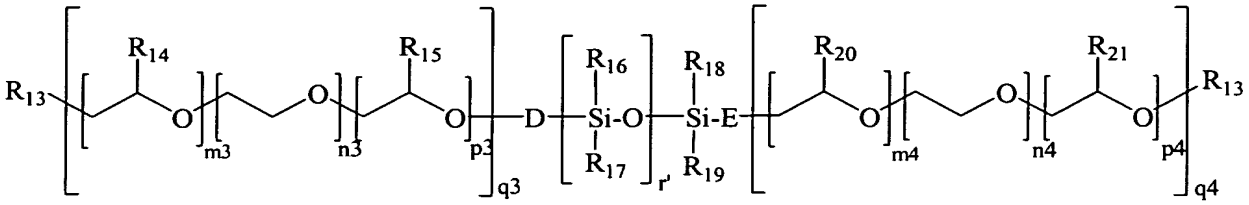
~~where~~ wherein

- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl isopropenyl benzylurethane and allylurethane,~~ and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- A is a group which may be present, in which case it represents a hydrocarbon radical having from 1 to 4 carbon atoms,
- B represents a hydrocarbon radical having from 1 to 4 carbon atoms,

or a mixture of several of said monomers,

and ~~in that~~ wherein the crosslinking monomer is selected from the group consisting of ethylene glycol dimethacrylate, trimethylolpropanetriacrylate, allyl acrylate, the allyl maleates, methylene-bis-acrylamide, methylene-bis-methacrylamide, tetrallyloxyethane,

triallylcyanurates, and allyl ethers prepared from polyols, ~~such as pentaerythritol, sorbitol, sucrose~~ or selected from the group consisting of molecules of formula (III):



(III)

~~where~~ wherein

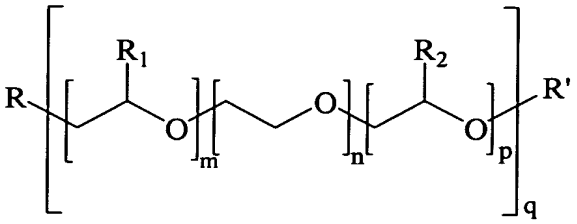
- m_3, p_3, m_4 and p_4 represent a number of alkylene oxide units less than or equal to 150,
- n_3 and n_4 represent a number of ethylene oxide units less than or equal to 150
- q_3 and q_4 represent an integer equal to at least 1 and such that $0 \leq (m_3+n_3+p_3)q_3 \leq 150$ and $0 \leq (m_4+n_4+p_4)q_4 \leq 150$,
- r' represents a number such that $1 \leq r' \leq 200$,
- R_{13} represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- R_{14}, R_{15}, R_{20} and R_{21} represent hydrogen or the methyl or ethyl radical,
- R_{16}, R_{17}, R_{18} and R_{19} represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof, and
- D and E are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms,

or a mixture of several of said monomers,

Claim 11 (Currently Amended): An agent for improving the activation of optical brightness according to claim 7 ~~one of claims 7 to 10, characterized in that it~~ wherein the agent is a water-soluble copolymer consisting, by weight, of:

a) from 2% to 95%~~, and more particularly from 5% to 90%,~~ of at least one ethylenically unsaturated anionic monomer having a monocarboxylic function selected from ~~among~~ the group consisting of ethylenically unsaturated monomers having a monocarboxylic function, ~~such as acrylic or methacrylic acid or hemiesters of diacids such as C_1 to C_4 monoesters of maleic or itaconic acid, or mixtures thereof, or selected from among the~~ ethylenically unsaturated monomers having a dicarboxylic function, ~~such as crotonic, isocrotonic, cinnamic, itaconic, maleic acid, or anhydrides of carboxylic acids, such as maleic anhydride or selected from among the~~ ethylenically unsaturated monomers having a sulfonic function, ~~such as acrylamido-methyl-propane-sulfonic acid, sodium methallylsulfonate, vinylsulfonic acid and styrenesulfonic acid or selected from among the~~ ethylenically unsaturated monomers having a phosphoric function, ~~such as vinylphosphoric acid, ethylene glycol methacrylate phosphate, propylene glycol methacrylate phosphate, ethylene glycol acrylate phosphate, propylene glycol acrylate phosphate and their ethoxylates or selected from among the~~ ethylenically unsaturated monomers having a phosphonic function ~~such as vinylphosphonic acid, or~~ and mixtures thereof,

b) from 2 to 95% ~~and, more particularly, from 5% to 90%,~~ of at least one non-ionic ethylenically unsaturated monomer of formula (I):



(I)

~~where~~ wherein

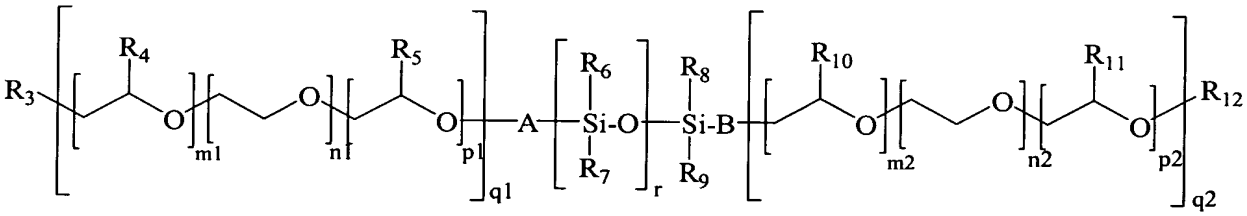
- m and p represent a number of alkylene oxide units less than or equal to 150,
- n represents a number of ethylene oxide units less than or equal to 150
- q represents an integer equal to at least 1 and such that $5 \leq (m+n+p)q \leq 150$, ~~and preferably such that $15 \leq (m+n+p)q \leq 120$,~~
- R_1 represents hydrogen or the methyl or ethyl radical,
- R_2 represents hydrogen or the methyl or ethyl radical,
- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides, and
- R' represents hydrogen or a hydrocarbon radical having from 1 to 40 carbon atoms~~, and preferably represents a hydrocarbon radical having from 1 to 12 carbon atoms and even more preferably a hydrocarbon radical having from 1 to 4 carbon atoms~~,

or a mixture of several monomers of formula (I),

c) from 0% to 5% of at least one monomer of the acrylamide or methacrylamide type or their derivatives ~~such as N-[3-(dimethylamino) propyl] acrylamide or~~

~~N-[3-(dimethylamino) propyl] methacrylamide,~~ and mixtures thereof, ~~or~~ at least one non water-soluble monomer ~~such as the alkyl acrylates or methacrylates~~, unsaturated esters ~~such as N-[2-(dimethylamino) ethyl] methacrylate, or N-[2-(dimethylamino) ethyl] acrylate~~, vinyls ~~such as vinyl acetate, vinylpyrrolidone, styrene, alphamethylstyrene~~ and their derivatives, ~~or~~ at least one cationic monomer or quaternary ammonium ~~such as [2-(methacryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [2-(acryloyloxy) ethyl] trimethyl ammonium chloride or sulfate, [3-(acrylamido) propyl] trimethyl ammonium chloride or sulfate, dimethyl diallyl ammonium chloride or sulfate, [3-(methacrylamido) propyl] trimethyl ammonium chloride or sulfate~~, ~~or~~ at least one organofluorinated monomer, or at least one organosilylated monomer[[,]] selected ~~preferably~~ from ~~among~~ the group consisting of molecules of formulae (IIa) ~~or~~ and (IIb),

with formula (IIa)



~~where~~ wherein

- m_1, p_1, m_2 and p_2 represent a number of alkylene oxide units less than or equal to 150,
- n_1 and n_2 represent a number of ethylene oxide units less than or equal to 150,
- q_1 and q_2 represent an integer equal to at least 1 and such that $0 \leq (m_1+n_1+p_1)q_1 \leq 150$ and $0 \leq (m_2+n_2+p_2)q_2 \leq 150$,
- r represents a number such that $1 \leq r \leq 200$,

- R_3 represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- R_4, R_5, R_{10} and R_{11} represent hydrogen or the methyl or ethyl radical,
- R_6, R_7, R_8 and R_9 represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof,
- R_{12} represents a hydrocarbon radical having from 1 to 40 carbon atoms, and
- A and B are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms,

with formula (IIb)

$$R - A - Si(OB)_3$$

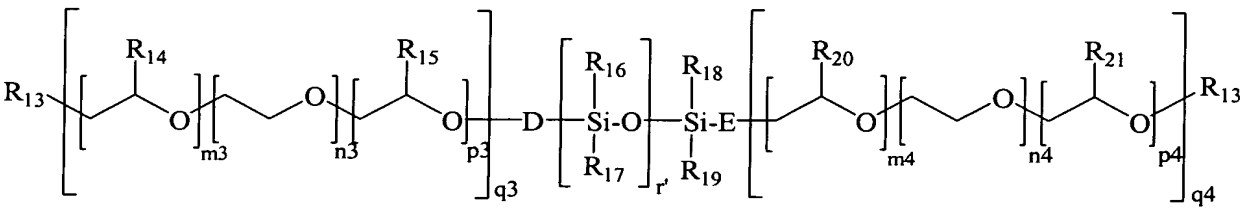
~~where~~ wherein

- R represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α-α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,
- A is a group which may be present, in which case it represents a hydrocarbon radical having from 1 to 4 carbon atoms, and

- B represents a hydrocarbon radical having from 1 to 4 carbon atoms,

or a mixture of several of said monomers,

d) from 0% to 3% of at least one crosslinking monomer selected from the group consisting of ethylene glycol dimethacrylate, trimethylolpropanetriacrylate, allyl acrylate, the allyl maleates, methylene-bis-acrylamide, methylene-bis methacrylamide, tetrallyloxyethane, triallylcyanurates, and allyl ethers prepared from polyols ~~such as pentaerythritol, sorbitol, sucrose or others~~, or selected from the group consisting of molecules of formula (III):



(III)

~~where~~ wherein

- m_3, p_3, m_4 and p_4 represent a number of alkylene oxide units less than or equal to 150,
- n_3 and n_4 represent a number of ethylene oxide units less than or equal to 150,
- q_3 and q_4 represent an integer equal to at least 1 and such that $0 \leq (m_3+n_3+p_3)q_3 \leq 150$ and $0 \leq (m_4+n_4+p_4)q_4 \leq 150$,
- r' represents a number such that $1 \leq r' \leq 200$,
- R_{13} represents a radical ~~containing~~ comprising a polymerizable unsaturated function, belonging to the vinyl group and to the group of acrylic, methacrylic, maleic, itaconic, crotonic, and vinylphtalic esters and to the group of urethane unsaturates ~~such as acrylurethane, methacrylurethane, α α' dimethyl-isopropenyl-benzylurethane and allylurethane~~, and to the group of allyl or vinyl ethers, whether or not substituted, or to the group of ethylenically unsaturated amides or imides,

- R_{14}, R_{15}, R_{20} and R_{21} represent hydrogen or the methyl or ethyl radical,
- R_{16}, R_{17}, R_{18} and R_{19} represent straight or branched alkyl, aryl, alkylaryl or arylalkyl groups having from 1 to 20 carbon atoms, or a mixture thereof, and
- D and E are groups which may be present, in which case they represent a hydrocarbon radical having from 1 to 4 carbon atoms

or a mixture of several of said monomers,

the total of the proportions of components a), b), c) and d) being equal to 100%.

Claim 12 (Currently Amended): ~~An~~ The agent improving the activation of optical brightness according to claim 7, ~~one of claims 7 to 11, characterized in that it~~ wherein the agent is a copolymer in its acid form or fully or partially neutralized by one or more neutralization agents having a monovalent neutralizing function or a polyvalent neutralizing function ~~such as, for the monovalent function, those selected from among the group consisting of the alkaline cations, in particular sodium, potassium, lithium, ammonium or the primary, secondary or tertiary aliphatic and/or cyclic amines such as stearylamine, the ethanolamines (mono-, di-, triethanolamine), mono and diethylamine, cyclohexylamine, methylcyclohexylamine, aminomethylpropanol, morpholine or, for the polyvalent function, those selected from among the group consisting of alkaline earth divalent cations, in particular magnesium and calcium, or zinc, and of the trivalent cations, including in particular aluminium, or of certain cations of higher valency~~.

Claim 13 (Currently Amended): A method for the dispersion in aqueous suspension of mineral matter, comprising adding ~~characterized in that use is made of~~ the copolymer according to claim 1 ~~one of the claims 1 to 6~~ to said aqueous suspension.

Claim 14 (Currently Amended): ~~A~~ The method for the dispersion in aqueous suspension of mineral matter[[,]] according to claim 13, ~~characterized in that use is made of~~ wherein said aqueous solution comprises from 0.05% to 5% by dry weight of said copolymer with respect to the dry weight of ~~the~~ fillers and/or pigments~~, and, more particularly, in that use is made of 0.1% to 3% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 15 (Currently Amended): ~~A~~ The method for the dispersion in aqueous suspension of mineral matter according to claim 13, ~~one of claims 13 or 14, characterized in that~~ wherein the mineral matter is selected from ~~among~~ the group consisting of calcium carbonate, dolomites, kaolin, talc, gypsum, titanium oxide, satin white or aluminium trihydroxide, mica and mixtures thereof ~~the mixture of these fillers, such as talc-calcium carbonate or calcium carbonate-kaolin mixtures, or mixtures of calcium carbonate with minerals such as talc-calcium carbonate or talc-titanium dioxide co-structures, and consists more particularly of calcium carbonate such as natural calcium carbonate selected from among marble, calcite, chalk or mixtures thereof~~.

Claim 16 (Currently Amended): An aqueous suspension of mineral matter, ~~characterized in that it contains~~ comprising the copolymer according to claim 1, ~~one of claims 1 to 6 and more particularly in that it contains~~ wherein said aqueous suspension comprises from 0.05% to 5% by dry weight of said copolymer with respect to the dry weight of ~~the~~ fillers and/or pigments~~, and more particularly in that it contains 0.1% to 3% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 17 (Currently Amended): ~~An~~ The aqueous suspension of mineral matter dispersed according to claim 16, ~~characterized in that the~~ wherein said mineral matter is selected from ~~among~~ the group consisting of calcium carbonate, dolomites, kaolin, talc, gypsum, titanium oxide, satin white or aluminium trihydroxide, mica and mixtures thereof ~~the mixture of these fillers, such as talc-calcium carbonate or calcium carbonate-kaolin mixtures, or mixtures of calcium carbonate with aluminium trihydroxide, or mixtures with synthetic or natural fibres or co-structures of minerals such as talc-calcium carbonate or talc-titanium dioxide co-structures, and consists more particularly of calcium carbonate such as natural calcium carbonate selected from among marble, calcite, chalk or mixtures thereof~~.

Claim 18 (Currently Amended): A method for the grinding in aqueous suspension of mineral matter, comprising ~~characterized in that use is made of~~ adding the copolymer according to claim 1 ~~one of claims 1 to 6~~ to said aqueous suspension.

Claim 19 (Currently Amended): ~~A~~ The method for the grinding in aqueous suspension of mineral matter, according to claim 18, wherein ~~characterized in that use is made of~~ said aqueous suspension comprises 0.05% to 5% by dry weight of said copolymer with respect to the dry weight of ~~the~~ fillers and/or pigments~~, and, more particularly, in that use is made of 0.1% to 3% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 20 (Currently Amended): ~~A~~ The method for the grinding in aqueous suspension of mineral matter according to claim 18, ~~one of claims 18 or 19, characterized in that the~~ wherein said mineral matter is selected from ~~among~~ the group consisting of calcium carbonate, dolomites, kaolin, talc, gypsum, titanium oxide, satin white or aluminium

trihydroxide, mica and mixtures thereof ~~the mixture of these fillers, such as talc-calcium aluminium trihydroxide, or mixtures with synthetic or natural fibres or co-structures of minerals such as talc-calcium carbonate or talc-titanium dioxide co-structures, and consists more particularly of calcium carbonate such as natural calcium carbonate selected from among marble, calcite, chalk or mixtures thereof~~.

Claim 21 (Currently Amended): An aqueous suspension of ground mineral matter, comprising ~~characterized in that it contains~~ the copolymer according to claim 1~~, one of claims 1 to 6 and more particularly in that it contains~~ wherein said aqueous suspension comprises from 0.05% to 5% by dry weight of said copolymer with respect to the dry weight of ~~the~~ fillers and/or pigments~~, and more particularly in that it contains 0.1% to 3% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 22 (Currently Amended): ~~An~~ The aqueous suspension of ground mineral matter according to claim 21, wherein ~~characterized in that the~~ said mineral matter is selected from ~~among~~ the group consisting of calcium carbonate, dolomites, kaolin, talc, gypsum, titanium oxide, satin white or aluminium trihydroxide, mica and mixtures thereof ~~the mixture of these fillers, such as talc-calcium carbonate or calcium carbonate-kaolin mixtures, or mixtures of calcium carbonate with aluminium trihydroxide, or mixtures with synthetic or natural fibres or co-structures of minerals such as talc-calcium carbonate or talc-titanium dioxide co-structures, and consists more particularly of calcium carbonate such as natural calcium carbonate selected from among marble, calcite, chalk or mixtures thereof~~.

Claim 23 (Currently Amended): A method for the manufacture of filler ~~characterized in that use is made of~~ comprising adding the copolymer according to claim 1 ~~one of the claims 1 to 6~~ to said filler.

Claim 24 (Currently Amended): ~~A~~ The method for the manufacture of filler according to claim 23, ~~characterized in that use is made of~~ wherein said filler comprises from 0.05% to 5% by dry weight of said copolymer with respect to the dry weight of ~~the~~ fillers and/or pigments~~, and, more particularly, in that use is made of 0.1% to 1% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 25 (Currently Amended): A filler comprising ~~characterized in that it contains~~ the copolymer according to claim 1, wherein said filler comprises ~~one any of claims 1 to 6 and more particularly in that it contains~~ from 0.05% to 5% by dry weight of said copolymer with respect to the total dry weight of ~~the~~ fillers and/or pigments, ~~and more particularly in that it contains 0.1% to 1 % by dry weight of said copolymer with respect to the total dry weight of the fillers and/or pigments~~.

Claim 26 (Currently Amended): A method for the manufacture of coating ~~colour~~ color, ~~characterized in that use is made of the~~ comprising adding the copolymer according to claim 1 ~~one of claims 1 to 6~~ to said coating color.

Claim 27 (Currently Amended): A method for the manufacture of coating ~~colour~~ color according to claim 26, ~~characterized in that use is made of~~ wherein the coating color comprises from 0.05% to 5% by dry weight of said copolymer with respect to the dry weight

of ~~the~~ fillers and/or pigments~~, and, more particularly, in that use is made of from 0.1% to 2% by dry weight of said copolymer with respect to the dry weight of the fillers and/or pigments~~.

Claim 28 (Currently Amended): A coating ~~colour~~ color ~~characterized in that it contains~~ comprising the copolymer according to claim 1, ~~one of claims 1 to 6 and more particularly in that it contains~~ wherein said coating color comprises from 0.05% to 5% by dry weight of said copolymer with respect to the total dry weight of ~~the~~ fillers and/or pigments~~,~~ ~~and more particularly in that 0.1% to 2% by dry weight of said copolymer with respect to the total dry weight of the fillers and/or pigments~~.

Claim 29 (Currently Amended): The ~~use of a~~ copolymer according to claim 1, wherein said copolymer is ~~any one of claims 1 to 6 as~~ an additive added to suspensions of dispersed mineral matter.

Claim 30 (Currently Amended): The ~~use of a~~ copolymer according to claim 1, wherein said copolymer is ~~any one of claims 1 to 6 as~~ an additive added to suspensions of ground mineral matter.

Claim 31 (Currently Amended): A manufactured and/or coated paper~~, characterized in that it contains~~ comprising the copolymer according to claim 1 ~~one of claims 1 to 6~~.

Claim 32 (Currently Amended): A textile composition~~, characterized in that it contains~~ comprising the copolymer according to claim 1 ~~one of claims 1 to 6~~.

Claim 33 (Currently Amended): A detergent composition~~, characterized in that it contains~~ comprising the copolymer according to claim 1 ~~one of claims 1 to 6~~.

Claim 34 (Currently Amended): A composition of paint~~, characterized in that it contains~~ comprising the copolymer according to claim 1 ~~one of claims 1 to 6~~.